

| TABLE 1 - 1/10/12 FIELD AND QC SAMPLING SUMMARY DIMOCK RESIDENTIAL GROUNDWATER SITE DIMOCK, SUSQUEHANNA COUNTY, PENNSYLVANIA Fort Meade R3 Lab | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------|
| Parameter | | Method | Matrix | Total Field and QA/QC Analyses (not including MS/MSD) |
| Metals: Al, Ca, Cr, Cu, Fe, Mg, Mn, Ni, Na, As, Se, Zn, Ti, Ba, Sn, Sb, Be, Cd, Co, Ti, V, K | DOC/MDL | 200.7/200.8 | drinking water | 71 |
| Metals: Al, Ca, Cr, Cu, Fe, Mg, Mn, Ni, Na, As, Se, Zn, Ti, Ba, Sn, Sb, Be, Cd, Co, Ti, V, K | DOC/MDL | 200.7/200.8 | Filtered drinking water | 71 |
| Total Mercury | DOC/MDL | 245.1 | drinking water | 71 |
| Dissolved Mercury | DOC/MDL | 245.1 | Filtered drinking water | 71 |
| Solids, Total Dissolved (TDS) | DOC/MDL | 2540C | drinking water | 71 |
| Solids, Total Suspended (TSS) | DOC/MDL | 2540D | drinking water | 71 |
| Anions, Chloride, Bromide, Fluoride, Nitrate/Nitrite as N, Orthophosphorus as P, Sulfate as SO ₄ | DOC/MDL | 300.0 | drinking water | 71 |
| Oil & Grease (HEM) | DOC/MDL | 1664A | drinking water | 71 |
| Total Phosphorus | DOC/MDL | Brad & Lube 365.4 (Modified) | drinking water | 71 |
| Total Hardness by Calculation | DOC/MDL | 2340B | drinking water | 71 |
| Alcohols: Ethanol, methanol, 1-propanol, 1-butanol, 2-butanol | DOC/MDL | 8015D | drinking water | 71 |
| Volatiles (TCL plus TICs and Acrylonitrile) (CLP Trace - 0.5 ug/L QL) | DOC/MDL | (OLC03.2) | drinking water | 71 + Trip Blanks for Coolers |
| Ethylene Glycol | On Demand | 8015D | drinking water | 71 |
| Glycols (incl. 2-Butoxyethanol, and 2-Methoxyethanol) | On Demand | 8321 (Modified) | drinking water | 71 |
| Total Metals: Sr, Li and U | On Demand | 200.7/200.8 | drinking water | 71 |
| Dissolved Metals: Sr, Li and U | On Demand | 200.7/200.8 | Filtered drinking water | 71 |
| Nitrate/Nitrite as Nitrogen | On Demand | Lachet Quick Chem 10-107-04-01C Analyzed using the manufacture's method that's based on 353.2 | drinking water | 71 |
| Total Nitrogen | On Demand | Lachet Quick Chem 10-107-04-4-A Analyzed using the manufacture's method that's based on 353.3 | drinking water | 71 |
| Semi-Volatiles (TCL plus TICs, 1-methylnaphthalene and Methoxyethanol) (CLP Trace plus TICs) 2- | On Demand | (OLC03.2) | drinking water | 71 |

| TABLE 1 - 1/10/12 FIELD AND QC SAMPLING SUMMARY DIMOCK RESIDENTIAL GROUNDWATER SITE DIMOCK, SUSQUEHANNA COUNTY, PENNSYLVANIA Other Regional EPA Labs | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------|----------------|-------------------------------------------------------|
| Parameter | | Method | Matrix | Total Field and QA/QC Analyses (not including MS/MSD) |
| Dissolved Gases, Methane, Ethane, & Ethene | EPA R9 Lab | RSK-175 (or equiv--EPA R9 SOP 325) | drinking water | 71 |
| DRO | EPA R9 Lab | 8015D (or equiv to EPA R9 SOP 380) | drinking water | 71 |
| GRO | EPA R9 Lab | 8015D (or equiv to EPA R9 SOP 385) | drinking water | 71 |
| Methylene Blue Active Substances (MBAS) | EPA R2 Lab | 5540C | drinking water | 71 |
| Ethylene Glycol (Back up Lab) | EPA R5 Lab or EPA R6 Lab | 8015D (or equiv to Region's SOP) | drinking water | 71 |

| TABLE 2 - 12/28/11 SAMPLE ANALYTICAL REQUIREMENTS SUMMARY DIMOCK RESIDENTIAL GROUNDWATER SITE DIMOCK, SUSQUEHANNA COUNTY, PENNSYLVANIA | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------------------------|----------------------------------|---------------------------------------------------------------|------------------|
| Analytical parameter and Method | Matrix | Sample Preservation | Holding Time | Sample Container(s) | Number |
| Alcohols: Ethanol, methanol, 1-propanol, 1-butanol, 2-butanol (8015D) | drinking water | Ice, 6°C | 7 days | Three 40-ml glass vials (Fill to capacity with no head space) | Procurement Sour |
| Alkalinity (2320B, 2340B) | drinking water | Ice, 6°C | 14 days | One 500-ml HDPE | Ft. Meade 3 |
| Anions: Chloride, Bromide, Fluoride, Nitrate/Nitrate as N, Orthophosphorus as P, Sulfate as SO4 (300.0) | drinking water | Ice, 6°C | 28 days | One 500-ml HDPE | Ft. Meade 1 |
| Bacteria (total coliform, HPC) | drinking water | Ice, 4°C (.008% Na2S2O3 if residual Cl- present) | 6 hours | 125 ml Pre-sterilized polypropylene | Tier 4 1 |
| d13C and d2H of methane (Isotech) | drinking water | Ice, 4°C, biocide pill in sample container | 6 months | one 1-L poly/TBD* | Tier 4 1 |
| d13C of inorganic carbon (Isotech) | drinking water | Ice, 4°C | 6 months | one 1-L poly/TBD* | Tier 4 1 |
| Complete compositional analysis of headspace gas (Isotech) | drinking water | Ice, 4°C, biocide pill in sample container | 6 months | one 1-L poly/TBD* | Tier 4 1 |
| Diss. gases methane, ethane, ethene (Isotech) | drinking water | Ice, 4°C, biocide pill in sample container | 6 months | one 1-L poly/TBD* | Tier 4 1 |
| Dissolved Gases, Methane, Ethane, & Ethene (RSK-175) | drinking water | pH<2 with HCl and cool with ice, 4°C | 7 days | One 40-ml glass vial | Tier 4 1 |
| Ethylene Glycol (8015M) | drinking water | Ice, 4°C | 7 days | Three 40-ml glass vials (Fill to capacity with no head space) | Tier 4 3 |
| DRO (8105M) | drinking water | Ice, 4°C | 7 days extract; 40 days analysis | Two 1-liter amber glass jars with teflon-lined lids | 2 |
| GRO (8105M) | drinking water | pH<2 with HCl and cool with ice, 4°C | 14 days | Three 40-ml glass vials (Fill to capacity with no head space) | 3 |
| Gamma Spec (K-40, Ra-226, Ra-228, Th-232, Th-234, U-235, U-238) (901.1) | drinking water | pH<2 with HNO3 and cool with ice, 4°C | 6 months | One 1-Liter HDPE | Tier 4 1 |
| Glycols incl. 2-Butoxyethanol (8316) | drinking water | Ice, 6°C | 7 days | Three 40-ml glass vials (Fill to capacity with no head space) | Ft. Meade 3 |
| Gross Alpha/Beta (900.0) | drinking water | pH<2 with HNO3 and cool with ice, 4°C | 6 months | One 1-Liter HDPE | Tier 4 1 |
| Metals: Al, Ca, Cr, Cu, Fe, Mg, Mn, Ni, Na, As, Se, Zn, Ti, Sr, Ba, Sn, Sb, Be, Cd, Co, Ti, U, V, K, Hg (200.8/245.1) | drinking water | pH<2 with HNO3 and cool with ice, 4°C | 6 months | One 1-Liter HDPE | Ft. Meade 1 |
| Metals: Al, Ca, Cr, Cu, Fe, Mg, Mn, Ni, Na, As, Se, Zn, Ti, Sr, Ba, Sn, Sb, Be, Cd, Co, Ti, U, V, K, Hg (200.8/245.1) | (filtered) drinking water | pH<2 with HNO3 and cool with ice, 4°C | 6 months | One 1-Liter HDPE | Ft. Meade 1 |
| Methylene Blue Active Substances (MBAS) (SM 5540C) | drinking water | Ice, 4°C | 48 hours | One 500-ml HDPE | Tier 4 1 |
| Nitrate/Nitrite (Total N) (353.2) | drinking water | pH<2, H2SO4, and cool with ice, 4°C | 7 days | Two 1-liter amber glass jars with teflon-lined lids | Ft. Meade 2 |
| Oil & Grease (HEM) (1664A) | drinking water | pH<2, H2SO4, and cool with ice, 4°C | 28 days | One 1-liter amber glass jars with teflon-lined lids | Tier 4 1 |
| pH (9040C) | drinking water | Ice, 6°C | As soon as possible | One 250-ml HDPE | Ft. Meade 1 |
| Phosphorus, Total (365.1) | drinking water | Ice, 6°C | 28 days | One 400-ml HDPE | Ft. Meade 1 |
| Ra-226 (903.1) | drinking water | pH<2 with HNO3 and cool with ice, 4°C | 6 months | One 1-Liter HDPE | Tier 4 1 |
| Ra-228 (904.0) | drinking water | pH<2 with HNO3 and cool with ice, 4°C | 6 months | One 1-Liter HDPE | Tier 4 1 |
| Semi-Volatiles (TCL plus TICs) (OLC03.2) | drinking water | Ice, 6°C | 7 days | Two 1-liter amber glass jars with teflon-lined lids | Ft. Meade 2 |
| Solids, Total Dissolved (TDS) (SM 2540C) | drinking water | Ice, 6°C | 7 days | One 500-ml HDPE | Ft. Meade 1 |
| Solids, Total Suspended (TSS) (SM 2540D) | drinking water | Ice, 6°C | 7 days | One 500-ml HDPE | Ft. Meade 1 |
| Stable isotopes of water (O,H) (Isotech) | drinking water | Ice, 4°C | 6 months | one 1-L poly/TBD* | Tier 4 1 |
| Turbidity, Nephelometric (180.1) | drinking water | Ice, 4°C | 48 hours | One 250-ml HDPE | Tier 4 1 |
| 2-Methoxyethanol (8015B) | drinking water | Ice, 6°C | 7 days | Two 1-liter amber glass jars with teflon-lined lids | Tier 4 2 |
| 1-methylnaphthalene (8270 or equivalent) | drinking water | Ice, 6°C | 7 days | Two 1-liter amber glass jars with teflon-lined lids | Tier 4 2 |
| Volatiles (TCL plus TICs) (CLP Trace - 0.5 ug/L QL) (OLC03.2) incl. Acrylonitrile | drinking water | 2 drops of 1:1 HCl, pH<2, Ice, 6°C | 7 days | Six 40-ml glass vials w/Teflon lined cap (no head space) | Ft. Meade 6 |
| Note: Analyses will be combined into sample bottles as applicable/appropriate based on determination by lab(s). KEY: °C = degrees Celsius C14 = Carbon 14 isotope CLP = Contract Lab Program D13C = delta of carbon-13 D2H = delta of deuterium H2SO4 = Sulfuric Acid HDPE = High density polyethylene HNO3 = Nitric Acid HPC = Heterotrophic Plate Count ml = milliliter Na2S2O3 = Sodium Thiosulfate pH = potential Hydrogen QL = Quantitation Limit Sr = Strontium TCL = Target Compound List TICs = Tentatively Identified Compounds ug/L = micrograms per liter * all parameters to be analyzed by isotech can be combined into one 1-L poly bottle with septum lid | | | | | 50 |

| Compounds | Prep Method | Analytical Method | TAT |
|----------------------------------------------------------------|--------------|----------------------|-----|
| Methane, ethane, ethene | | RSK-175 | |
| bis(2-ethylhexyl) phthalate (DEHP) | 3520C (CLLE) | SVOC OLC03.2 | 5 |
| aluminum, arsenic, lithium, manganese, sodium, iron | | 200.8 | |
| 2-methoxyethanol (Ethylene glycol monomethyl ether) | 3520C (CLLE) | SVOC OLC03.2, | |
| | | 8321 | |
| ethylene glycol | | 8015 | |
| triethylene glycol, and 2,2'-oxybisethanol (diethylene glycol) | | 8321 | |